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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,784	06/23/2000	Otto Hofstetter	24140	3739

7590 01/14/2004
Nath & Associates
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1030 15th Street NW
Washington, DC 20005

EXAMINER

LEE, EDMUND H

ART UNIT	PAPER NUMBER
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1732

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,784

Applicant(s)

HOFSTETTER ET AL

Examiner

EDMUND H. LEE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-25 is/are pending in the application.
- 4a) Of the above claim(s) 19-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-18, 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. This application contains claims 19-22 drawn to an invention nonelected with traverse in Paper No. 12. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Krishnakumar et al (USPN 4990301). Krishnakumar et al teach the claimed process as evident by figs 1 and 2-4, and table 1. It is the examiner's position that as soon as the material enters the molding cavity the material starts to cool, i.e., an intrinsic cooling stage starts as soon as the material of Krishnakumar et al starts to enter the molding cavity. As the material enters the molding cavity at the later stages of the molding processes of Krishnakumar et al, it would intrinsically fill up the space created by the shrinking of the cooled material. Also, it is clear from the data for figs 2-4 found in Table 1 of Krishnakumar et al that the thickness of the 2nd layer of Krishnakumar et al is within the claimed volumetric content for claimed component C.

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnakumar et al (USPN 4990301) in view of Swenson (USPN 6187241) as set forth in the Office action mailed 8/25/03.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnakumar et al (USPN 4990301). The above teaches of Krishnakumar et al are incorporated hereinafter. In regard to leaving the needle in the selected first one of the plurality of positions during the second and third steps of the cycle, such is not explicitly taught by Krishnakumar et al. However, it is well-known in the molding art to reduce molding complexity by reducing movement of molding tools during a molding cycle. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to maintain the position of the needle of Krishnakumar et al at the selected first position during the second and third steps of the molding process in order to reduce molding complexity.

7. Claims 17, 18 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnakumar et al (USPN 4990301) as set forth in the Office action mailed 8/25/03.

8. Applicant's arguments filed 10/28/03 have been fully considered but they are not persuasive. In regards to claims 13 and 14, applicant argues that Swenson using a pin

that is not used to initiate nor terminate the flow of any material for any layer. This argument is misplaced because Swenson was provided to make obvious the use of material having different viscosities. Swenson was not provided for its movable throttle pin. Applicant is reminded that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Applicant is further reminded that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant also argues that neither Krishnakumar et al nor Swenson teach the claimed cooling phase while replacing the material shrunk during the cooling phase. Applicant's argument is misplaced because Krishnakumar et al teach the claimed cooling phase with the step of replacing. As found in the Office action mailed 8/25/03, it is the examiner's position that as soon as the material enters the molding cavity the material starts to cool, i.e., an intrinsic cooling stage starts as soon as the material of Krishnakumar et al starts to enter the molding cavity. As the material enters the molding cavity at the later stages of the molding processes of Krishnakumar et al, it would intrinsically fill up the space created by the shrinking of the cooled material.

In regard to claims 17, 18 and 23-25, Applicant argues that Krishnakumar et al do not teach replacing material shrunk during the cooling phase. As found in the Office action mailed 8/25/03, it is the examiner's position that as soon as the material enters the molding cavity the material starts to cool, i.e., an intrinsic cooling stage starts as soon as the material of Krishnakumar et al starts to enter the molding cavity. As the material enters the molding cavity at the later stages of the molding processes of Krishnakumar et al, it would intrinsically fill up the space created by the shrinking of the cooled material.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is

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571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY
FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaanni can be reached on 703.305.5493. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.0661.

EDMUND H. LEE
Primary Examiner
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1/6/04

EHL